Common Criteria

VALIDATED
EAL 4+

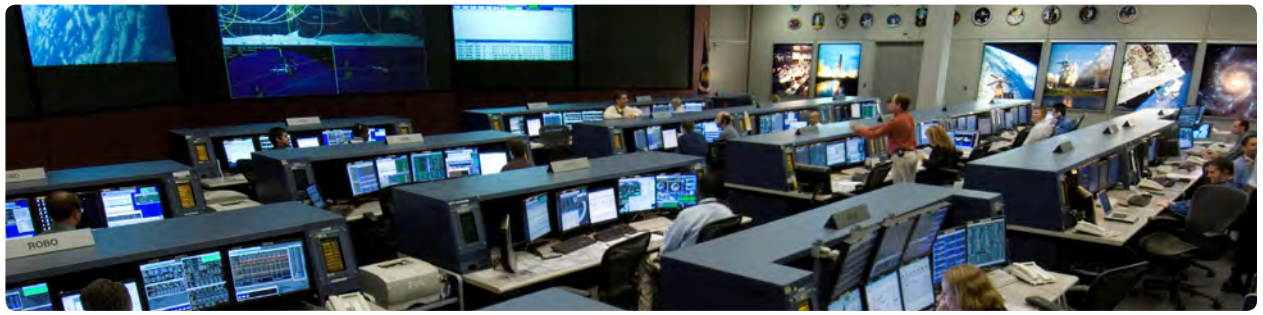
THE BELKIN ADVANCED SECURE WINDOWING KVM

belkin BUSINESS

Your Essential Connection

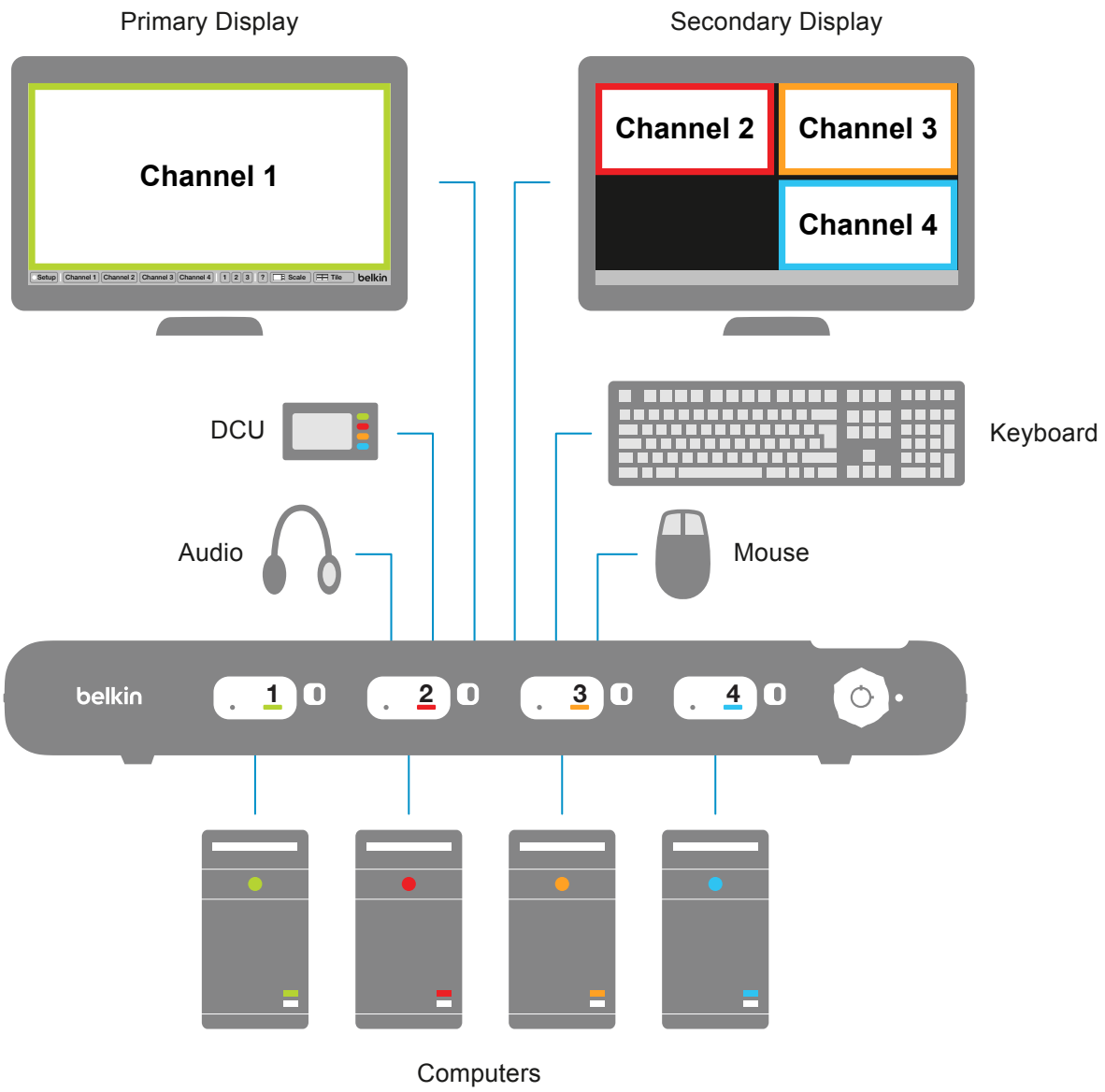
THE CURRENT SITUATION

There are many cases where analysts and operators need to work simultaneously with multiple computers and limited desktop space.



THE BELKIN SOLUTION

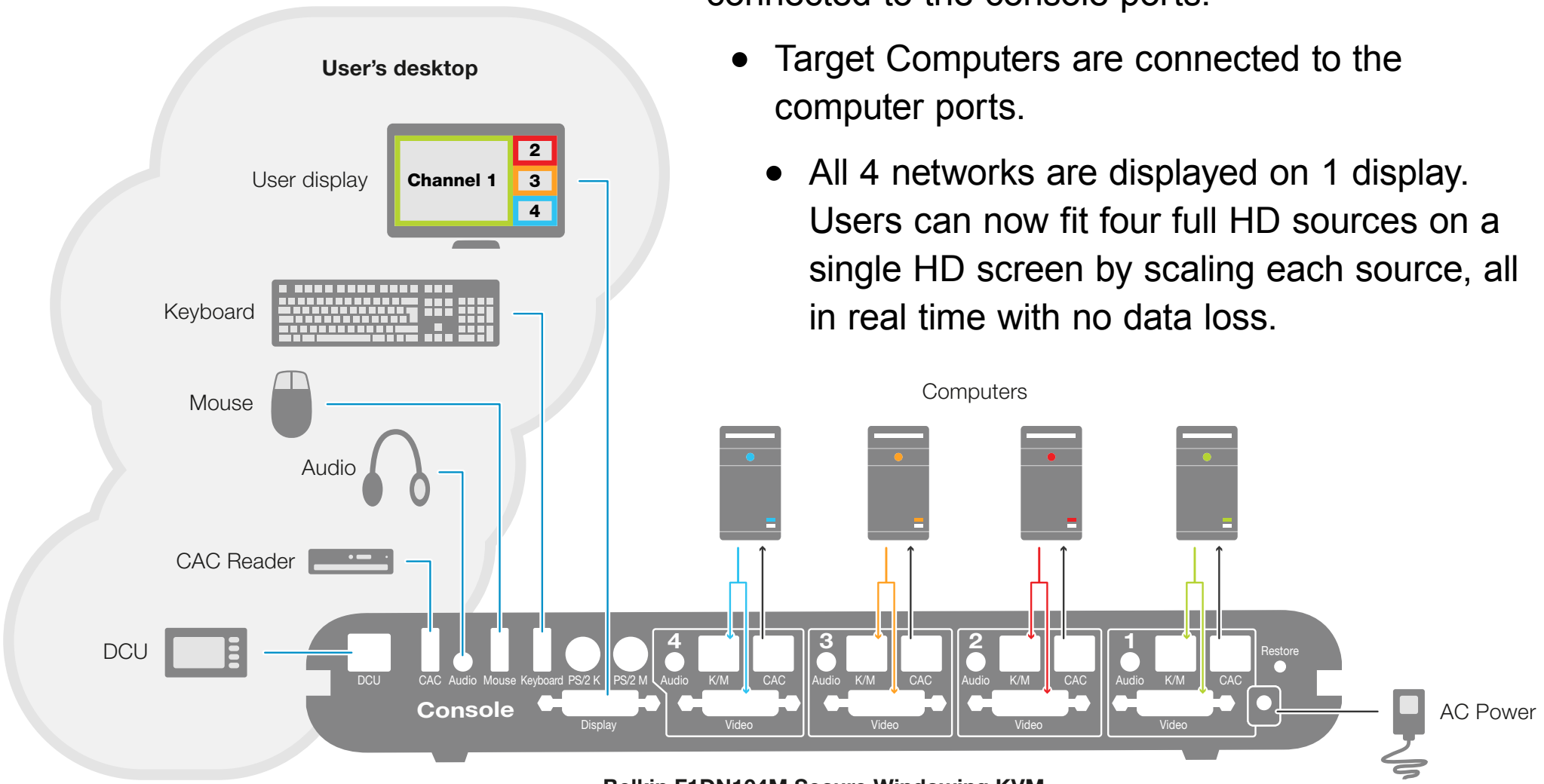
The Belkin Secure Windowing KVM is the only product in the market today that allows secure, comfortable, simultaneous interaction with up to four computers at different security levels, on one or two displays. Work continuously and monitor multiple channels in a windowing-like environment, no manual push button switching required.



F1DN204M Model Shown

BELKIN SECURE WINDOWING KVM SETUP

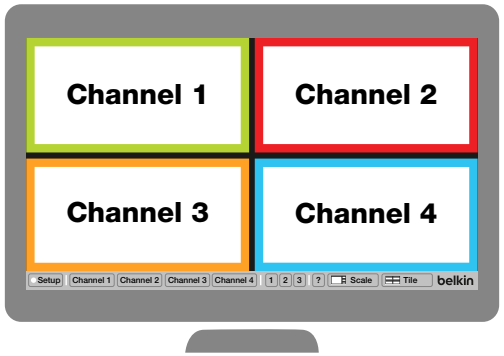
- The User Display, Keyboard and Mouse are connected to the console ports.
  - Target Computers are connected to the computer ports.
    - All 4 networks are displayed on 1 display. Users can now fit four full HD sources on a single HD screen by scaling each source, all in real time with no data loss.



Belkin F1DN104M Secure Windowing KVM

Tile Mode

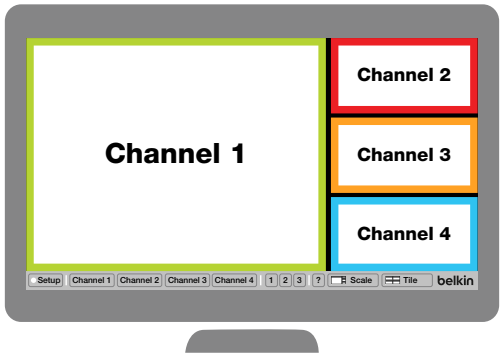
The Belkin Secure Windowing KVM offers users two additional, unique working modes: tile and scaling. The tile mode allows users to view all source windows in equal size scaled by 50%.



Tile Mode for Belkin Secure Windowing KVM models F1DN104M and F1DN104Y

Scale Mode

The Belkin Advanced Secure Windowing KVM has an advanced scaling function allowing the user to scale the video source 1/2 times and 1/4 times smaller to assure good view and a superb work experience. Users can now fit four full HD sources on a single HD screen by scaling each source, all in real time with no data loss.



Scale Mode for Belkin Secure Windowing KVM models F1DN104M and F1DN104Y

Scale Mode for Belkin Secure Windowing KVM model F1DN204M

WHERE IS THE BELKIN SECURE WINDOWING KVM USED?

The Belkin Secure Windowing KVM is suitable for environments where space is limited. Environments where multiple networks need to be worked on simultaneously but there is no sufficient desktop space for multiple displays. The Belkin Secure Windowing KVM is most suitable for high density command and control centers, planes, defense and intelligence.

MOBILE COMMAND AND CONTROL

DEFENSE, INTELLIGENCE AND MORE…

AIR COMBAT COMMAND

KEY FEATURES AND BENEFITS…

- **Advanced Viewing Technology**

  View up to four networks simultaneously through a pixel-by-pixel video image, with no quality loss, latency, reduced colors, dropped frames or artifacts, all in real time. Work constantly and monitor multiple channels; no manual push button switching of channels is required!”

- **Advanced Scaling Function**

  The Belkin Secure Windowing KVM has an advanced scaling function allowing the user to scale the video source x 1/2 and x 1/4 to assure a good view, and a superb working experience.

- **Tile and Scale Modes**

  The Belkin Secure Windowing KVM offers users two additional, unique working modes: tile and scaling. The tile mode allows users to view all source windows in equal size scaled by 50%. The scale mode allows users to focus on one main source while viewing the other sources scaled by a 25%. These modes are a perfect solution for monitoring multiple sources simultaneously.

- **DCU (Desktop Controller Unit) Support**

  Allows you to connect an optional DCU (sold separately) device to control your KM or KVM Switch from 50 feet away, which reduces desktop clutter and increases work space.

KEY FEATURES AND BENEFITS…

- **The Ultimate Security Solution**

  A host of security features including - Unidirectional Data Paths, Dedicated Processors for Emulation, No Shared Resources and USB Port Protection making the Belkin Secure Windowing KVM the ultimate security solution for government agencies and private sector corporations with multiple security classifications.

- **Common Criteria Validated**

  The Belkin Secure Windowing KVM is Common Criteria validated to EAL 4+ (Evaluation Assurance Level 4) to assure the highest level of protection, and the product complies with Common Criteria, Protection Profile 2.1.

A WIDE RANGE OF MODELS

The Belkin Secure Windowing KVM is available in 3 different models:

Single DVI-D Display Model

The F1DN104M models allows the user to work with a single display while accessing four isolated networks with different security levels through scaled windows.

Single DP Display Model

Similar to the Single DVD-D Display Model, The F1DN104Y models allows the user to work with a single DisplayPort 1.1 or 1.2 display while accessing four isolated networks with different security levels through scaled windows."

Dual Display Model

The dual display model of the Belkin Secure Windowing KVM supports two DVI displays and is the ideal setup for high-end users. When the dual display model is used in scale mode, the active channel will be displayed on the main display while the other three channels will be scaled by 50% and displayed on the secondary display.

Specifications

Part No.	F1DN104M, F1DN204M, F1DN104Y
Enclosure	Heavy-duty extruded aluminum enclosure with metal faceplate
Power Requirements	12V DC, 5A (maximum) power adapter with center-pin-positive polarity
AC Input	100 to 240VAC
No. of Secure Channels	4
No. of Computers Supported	4
Displays Supported	**104M, 104Y models:** 1 x single-link DVI-D display; HDMI interface supported with adapter **204M model:** 2 x single-link DVI-D display; HDMI interface supported with adapter **104Y model:** 1 x DisplayPort1.1 or 1.2 compatible display
Input Video Resolution	Up to 1920x1200

BELKIN SECURE WINDOWING KVM SPECIFICATIONS

Input Windows Size	800x600 (4:3) SVGA; 1280x1024 (5:4) SXGA; 1920x1080 (16:9) HD1080; or 1920x1200 (16:10) WUXGA.
Console Keyboard Input	USB Type-A female connector or PS/2 Mini-DIN 6-pin female connector
Console Mouse Input	USB Type-A female connector or PS/2 Mini-DIN 6-pin female connector
Console CAC Input	USB Type A
Console Display Port	1 DVI-I single-link female connector (F1DN104M) 2 DVI-I single-link female connector (F1DN204M) 1 DisplayPort female connector (F1DN104Y)
Console Audio Out	3.5mm stereo jack
PC Keyboard/Mouse Ports	USB Type-B jack
PC CAC Ports	USB Type-B jack
PC Audio Input	3.5mm stereo jack
PC Video Input Port	DVI-D single-link female

BELKIN SECURE WINDOWING KVM SPECIFICATIONS

Port-Selectors Push Buttons	4
LED Indicators	4
Operating Temp	32° to 104° F (0° to 40° C)
Storage Temp	-4° to 140° F (-20° to 60° C)
Humidity	0-80% RH, non-condensing
Dimensions	80 (W) x 158 (D) x 34 (H) mm 3.15 (W) x 6.22 (D) x 1.34 (H) inches
Weight	1 kg. (2.2 lbs.)
Security Accreditation	Common Criteria EAL 4+
Made in	United States
Product Design Life-Cycle	10 years

OUTPUT DISPLAY RESOLUTIONS SUPPORTED

Resolution\Model	F1DN104M	F1DN204M	F1DN104Y
1280x800 (16:10)	●	●	
1280x1024 (5:4)	●	●	●
1600x1200 (4:3)			●
1680x1050 (16:10)	●	●	●
1920x1080 (16:9)	●	●	●
1920x1200 (16:10)	●	●	●
2x1920x1080 (16:9)		●	
2x1920x1200 (16:10)		●	
2560x1440 (16:9)			●
2560x1600 (16:10)			●

ADMINISTRATOR SETUP

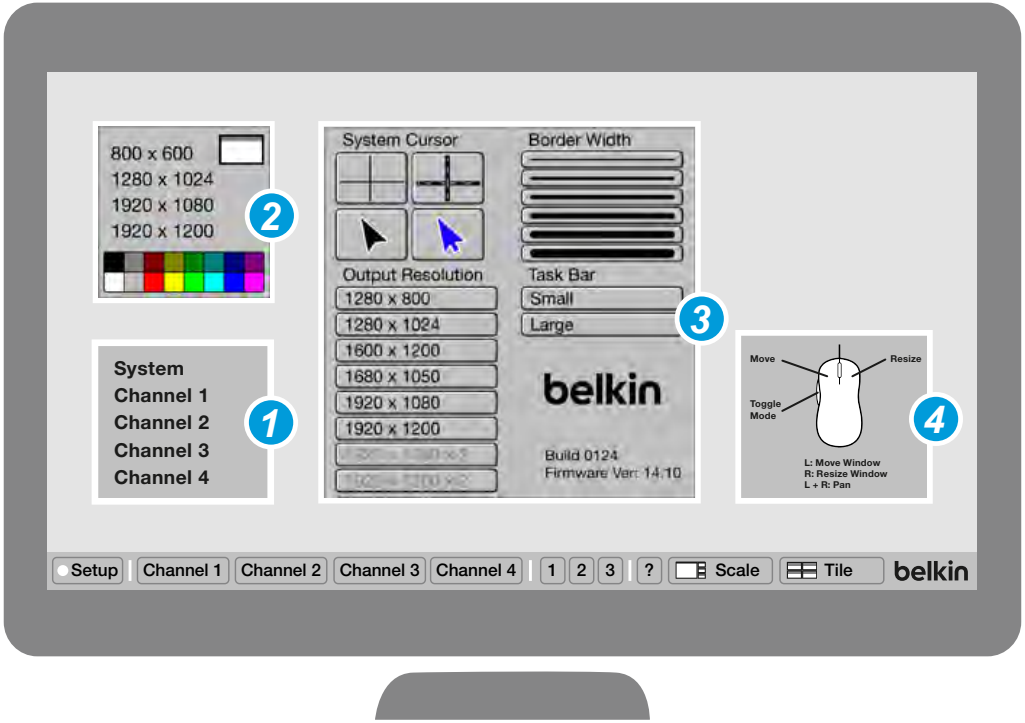
To enter administrator setup mode the administrator key should be inserted into the front panel key lock and rotated in clockwise direction.

Administrator Key Lock

ADMINISTRATOR SETUP

Once in administrator clicks on setup icon at the bottom left side of the screen, the Main Admin Setup windows appears and can be accessed.

1. **Main Admin Menu**
   Enables selection of System setup window or channel specific window using the mouse.
2. **Channel menu**
   Enables selection of channel input resolution (4 options) and border color from 16 color options.
3. **System menu**
   Enables system level settings.
   Administrator can select:
   Display output resolution from 2/6/8 options;
   - Border width from 6 options;
   - Taskbar size from 2 options; and
   - System cursor type from 4 options..
4. **Help menu**



RESTORE FACTORY DEFAULTS BUTTON

If during installation as a result of bad output resolution (resolution not supported by display) the video image on the user display is lost it is possible to recover the device through the use of Restore Factory Defaults switch Pressing this switch momentarily will return the Belkin Secure Windowing KVM to the original production settings including lowest output resolution.

BELKIN SECURE DESKTOP CONTROLLER UNIT (DCU)

The Belkin Desktop Controller Unit (DCU) is a secure remote controller device used in conjunction with the Belkin Secure Windowing KVM. The Belkin Secure DCU provides clear textual indications of the selected and connected channels and can be placed up to 50ft away from the Belkin Secure KVM switch. The Belkin Secure DCU enhances security by preventing user errors and providing a total, physical separation between the KVM and connected computers, from the user's desktop. The Belkin Secure DCU is connected to the DCU Port of the Belkin Secure KVM.

Rear-Panel Features – F1DN104M

1	DCU port	**6**	Console PS/2 keyboard port	**11**	Computer USB CAC port
2	Console USB CAC port	**7**	Console PS/2 mouse port	**12**	Restore factory default push-button
3	Console audio out jack	**8**	Primary Display out jack	**13**	Host primary video input jack
4	Console USB mouse port	**9**	Computer audio port	**14**	DC power jack
5	Console USB keyboard port	**10**	Computer USB KM port		

Rear-Panel Features – F1DN104Y

1	DCU port	**6**	Console PS/2 keyboard port	**11**	Computer USB CAC port
2	Console USB CAC port	**7**	Console PS/2 mouse port	**12**	Restore factory default push-button
3	Console audio out jack	**8**	Computer monitor port	**13**	Host primary video input jack
4	Console USB mouse port	**9**	Computer audio port	**14**	DC power jack
5	Console USB keyboard port	**10**	Computer USB KM port		

Rear-Panel Features – F1DN204M

1	DCU port	**6**	Console PS/2 keyboard port	**11**	Computer USB KM port
2	Console USB CAC port	**7**	Console PS/2 mouse port	**12**	Computer USB CAC port
3	Console audio out jack	**8**	Secondary Display out Jack	**13**	Restore factory default push-button
4	Console USB mouse port	**9**	Primary Display out jack	**14**	Host primary video input jack
5	Console USB keyboard port	**10**	Computer audio port	**15**	DC power jack

FREQUENTLY ASKED QUESTIONS

- **What is the difference between a KVM and a Windowing KVM?**

  KVM's are designed to switch displays, allowing the user to only see and manage one target device at a time. When using a Windowing KVM, the user can work simultaneously across computers at different security levels, without exposing the organization to the risks of information leakage through the KVM. The Belkin Secure Windowing KVM device uses advanced video processing technology to draw a high resolution dynamic "mosaic" of images generated by different computer sources.

- **Is the Belkin Secure Windowing KVM as secure as the Belkin Secure KVM switches?**

  Yes. The Belkin Secure Windowing KVM Switch is a derivative of the award winning Belkin Secure KVM product line, and is equipped with the same high security features as the Belkin Secure KVM; Active Always-On Anti-Tampering, Heavy-Duty Tamper-Resistant Enclosure, Tamper Evident Label, Unidirectional Data Paths, Dedicated Processors for Emulation, USB Port Protection, Non- Reprogrammable Firmware, Tamper-Proof Hardware, and more.

- **Can the Belkin Secure Windowing KVM use analog (VGA) computer output?**

  No. Only DVI is supported.

FREQUENTLY ASKED QUESTIONS

- **Is it possible to use the Belkin Secure DCU with the Belkin Secure Windowing KVM?**

  The F1DN001R and F1DN002R models of the Belkin Secure DCU are intended for use with Belkin 2 or 4-port KM and Windowing KVM.

- **Can the Belkin Secure Windowing KVM scale video input?**

  Yes, The Belkin Secure Windowing KVM has an advanced scaling function allowing the user to scale the video source (x 1/2 and x 1/4 smaller) to ensure proper viewing and superb work experience. A user can now fit four full HD sources on a single HD screen by scaling each source, all in real time with no data loss.

- **It is possible to use a mouse other than the mouse supplied with the Belkin Secure Windowing KVM?**

  It is recommended to use the mouse supplied with the Belkin Secure Windowing KVM but if another type of mouse is used, it must be a five-button mouse, with a recommended mouse DPI of 5400 for best performance.

For more information, please visit www.belkinbusiness.com

belkin BUSINESS • Your Essential Connection